providing a frame image showing the frame in a perspective view, the frame image having a picture portion corresponding to the portion of the frame used to view a picture mounted in the frame;

texture mapping the picture image to the picture portion of the frame image in order to generate the frame prototype image; and

modifying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image.

First, Oles, Kato and Dawson fail to show at least the modifying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image. The Office Action noted that:

> As per claim 1, Oles discloses a method of generating a frame prototype image showing a picture image framed within a frame, the method comprising:
>
> providing a frame image showing the frame in a perspective view, the frame image having a picture portion corresponding to the portion of the frame used to view a picture mounted in the frame (Figure 4 26); and
>
> mapping the picture image to the picture portion. of the frame image in order to generate the frame prototype image (Figure 3 24 to Figure 4 24).
>
> Oles discloses a method of generating a frame prototype image. It is noted that Oles does not explicitly disclose "modifying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image", however, this is known in the art as taught by Kato et al. hereinafter Kato. Kato discloses the frame prototype image is generated from the original picture (the design simulation is carried out by photographing or taking the picture of the interior of the automobile and then modifying the texture of a seat part in the photographed picture image, column 2, line 43-46).
>
> Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kato into Oles because Oles discloses a method of generating a frame prototype image and Kato discloses a frame prototype image can be modified in order to assist design simulation.
>
> Oles and Kato disclose a method of generating a frame prototype image. It is noted that Oles and Kato do not explicitly disclose using texture mapping the picture image of the frame image to generate the frame prototype image, however, this is known in the art as taught by Dawson et al., hereinafter Dawson. Dawson discloses a method of providing a texture mapped perspective view for digital map systems (column 2, line 61-62, since the digital map is a prototype image).

> Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Dawson into Oles and Kato because Oles and Kato disclose a method of generating a prototype image and Dawson discloses the image texture can be texture mapped in perspective in order to enhance visual reality (column 1, line 50).

Applicants respectfully traverse the rejection. Kato relates to a "texture mapping method that projects a specified texture picture onto the surface of an object in another specified picture. Three-dimensional data on the surface shape of the object to be projected is not known previously. The three-dimensional data on the surface shape of the object is estimated on the basis of the data in the objective picture to attain the texture mapping." (Abstract). Col. 2, lines 43-46 of Kato notes that "the design simulation is carried out by photographing or taking the picture of the interior of the automobile and then modifying the texture of a seat part in the photographed picture image."

Kato's teaching is similar to Dawson in that both relate to texture mapping. However, Kato and Dawson fail to show the specifics of modifying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image. There is simply no frame prototype in Dawson. Since this element is missing, neither Oles, Kato nor Dawson can render the claims obvious.

Further, Oles does not show the claimed perspective view. The Office Action asserted that, since Oles' "(and the size of the resulting) as well as move and position the combined image" are additional conditions of perspective view and since the two variables (size and position) are the only variable allowed to change in a head-on view image, Oles implies a perspective image means more than a head-on view and includes angle view.

Applicants disagree with the "implied" information provided using hindsight. Column 2 line 1 of Oles states "The present invention overcomes these deficiencies by providing a method and apparatus that allows a customer to visually determine the appropriate size of a portrait photograph and matching picture frame by displaying upon a portrait display viewer a perspective view of a combined video image of the photograph and the matching frame within a simulated room image." Further, Column 5 line 31–35: "The present invention as depicted in FIG. 5 allows the customer or operator to change the perspective of the video image (**and the size of the resulting portrait**) as well as move and position the combined image within the simulated room setting image." This is further supported by the fact that all Oles figures show a frontal view of the picture. The fact that the monitor showing the simulated picture(s) is shown

in a 3D perspective view further supports the contention that the "perspective view" in Oles is not the perspective view as claimed.

Oles, Kato and Dawson fail to show at least the modifying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image. The office action points to Oles' Fig. 4 26 to Fig. 5 26 as showing the modification of the texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image. However, the description of Fig. 4 fails to show this aspect, among others. As noted in Oles:

> Once satisfied with the combined image and referring now to FIG. 4, the customer can select a particular simulated room setting image 28 for displaying the combined image. The customer/operator scrolls through a series of simulated room setting images such as dens, living rooms, libraries, or bedrooms to find an image suitable for displaying the combined image. Like the picture frame images, the present invention includes previously stored images of simulated room settings for later retrieval. After selecting the simulated room setting image 28, the present invention combines the combined picture frame image 26 and video image 24 with the selected simulated room setting image as depicted in FIG. 4 to produce a simulated perspective room image. As previously stated, the present invention initially transposes the video image as a 5".times.7" image; and when combined with the room image, the video image appears in a perspective view of the room image to produce a simulated perspective room image. In other words, the combined video and picture frame image appears to the customer on video portrait viewer 20 in a perspective view as 5".times.7" picture would appear in the selected room setting. Upon seeing the perspective view, the customer can immediately determine whether the size of the portrait is correct, whether the picture frame matches the portrait, and whether the combined portrait and picture frame will match the selected room. The present invention as depicted in FIG. 5 allows the customer or operator to change the perspective of the video image (and the size of the resulting portrait) as well as move and position the combined image within the simulated room setting image. If for some reason, the customer does not want a picture frame, the present invention will work equally as well in displaying a video image of a portrait in a simulated perspective room image without a picture frame bordering the video image. Additionally, the present invention allows the customer to view one or more video images, with or without the picture frame image combination, in combination with the simulated room setting image so that the customer can see a perspective view of multiple portraits in a simulated room.

The above section in Oles compels the conclusion that Oles does not discuss the modifying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image, among others. Kato and Dawson is similarly lacking.

Additionally, the Office Action noted that "Since Oles specifically points out '(and the size of the resulting) as well as move and position the combined image' are additional conditions of perspective view and since the two variables (size and position) are the only variable allowed to change in a head-on view image, Oles implies a perspective image means more than a head-on view. Therefore, a perspective view includes angle view."

Applicants respectfully traverse the rejection. The "perspective" term in Oles relates to the "size of the resulting portrait". In contrast, in the present invention, page 6 provides a discussion of the "perspective view":

> A "perspective frame image" is an image that shows an in-perspective view of a frame. In other words, **the frame in such a perspective frame image is not shown in a head-on view**. For example, a frame can be arranged in a typical scene in which the frame might be displayed (e.g., on a table) and then a digital camera can be used to capture a perspective image of the frame as it appears in the scene. Also, a white piece of paper (or other suitable material) can be mounted in the frame where an image print would be displayed. As a result, the perspective frame image will include a white region located where an image print would be visible in the frame (also referred to here as the "picture area"). An example of such a perspective frame image 300 having a picture area 302 is shown in FIG. 3A.

As discussed above, Oles only shows a head-on view and does not show the perspective view. Kato does not mention perspective. Dawson is a hardware reference and there is no suggestion in the software system of Oles to incorporate the texture as hardware.

Based on the foregoing, Applicant respectfully traverses the Section 103(a) rejection. Applicant notes that the present rejection does not establish *prima facie* obviousness under 35 U.S.C. § 103 and M.P.E.P. §§ 2142-2143. The Examiner bears the initial burden to establish and support *prima facie* obviousness. *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976). To establish *prima facie* obviousness, three basic criteria must be met. M.P.E.P. § 2142. First, the Examiner must show some suggestion or motivation, either in the cited references or in the knowledge generally available to one of ordinary skill in the art, to modify the reference so as to produce the claimed invention. M.P.E.P. § 2143.01; *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Secondly, the Examiner must establish that there is a reasonable expectation of success for the modification. M.P.E.P. § 2142. Thirdly, the Examiner must establish that the prior art references teach or suggest all the claim limitations. M.P.E.P. §2143.03; *In re Royka*, 180 U.S.P.Q. 580 (CCPA 1974). The teachings, suggestions, and reasonable expectations of success must be found in the prior art, rather than in Applicant's disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1438 (CAFC 1991). Applicant respectfully submits that a *prima facie* case of obviousness has not been met because the Examiner's rejection fails on all of the above requirements.

Here, the Office Action fails to establish that there is a reasonable expectation of success for the modification. M.P.E.P. § 2142. Moreover, the prior art references fail to teach or suggest all the claim limitations. Here, neither Oles, Kato Dawson nor Kurashige shows at least the texture mapping element. Withdrawal of the Section 103 rejection on claim 10 is requested.

Claim 16 was rejected under 35 U.S.C. 103(a) as being unpatentable over Oberg (5,870,771) in view of Oles, Kato and Dawson. Again, the Office Action fails to establish that there is a reasonable expectation of success for the modification. M.P.E.P. § 2142. Moreover, the prior art references fail to teach or suggest all the claim limitations. Here, neither Oles, Kato, Dawson nor Oberg shows at least the modifying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image. Withdrawal of the Section 103 rejection on claim 16 is requested.

In sum, since the references do not show at least the texture mapping in connection with the other elements in the independent claims, Applicants submit that the references cannot anticipate or render obvious any of the independent claims. The dependent claims are allowable since they depend from allowable independent claims.

CONCLUSION

Applicants respectfully submit that all claims are in condition for allowance. Withdrawal of the rejection is respectfully requested. If for any reason the Examiner believes that a telephone conference would in any way expedite prosecution of the subject application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

Bao Tran

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